```
FILE 'REGISTRY' ENTERED AT 12:25:26 ON 02 OCT 2008
L1
              STRUCTURE UPLOADED
L2
             0 S L1
L3
            0 S L1 SSS FULL
L4
             STRUCTURE UPLOADED
L5
            0 S L4
L6
            0 S L4 SSS FULL
L7
             STRUCTURE UPLOADED
L8
            0 S L7
L9
            0 S L7 SSS FULL
L10
              STRUCTURE UPLOADED
Lll
            0 S L10
L12
            0 S L10 SSS FULL
L13
              STRUCTURE UPLOADED
L14
           44 S L13
L15
              STRUCTURE UPLOADED
L16
           15 S L15
L17
          360 S L15 SSS FULL
   FILE 'HCAPLUS' ENTERED AT 12:46:20 ON 02 OCT 2008
```

4 S L17

L18

=> file registry COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FILE 'REGISTRY' ENTERED AT 12:25:26 ON 02 OCT 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 1 OCT 2008 HIGHEST RN 1056151-32-6
DICTIONARY FILE UPDATES: 1 OCT 2008 HIGHEST RN 1056151-32-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=)

Uploading C:\Program Files\STNEXP\Queries\10525197generic.str

```
chain nodes :
7 19 20 21 22 23 24 25 26 27 28 29 31 33 34 35 38
ring nodes :
1 2 3 4 5 6 8 9 10 11 12 13 14 15 16 17 18
chain bonds :
2-7 5-33 7-8 11-31 13-23 13-28 14-22 14-27 15-19 15-26 17-20 17-25 18-24
18-29 19-21 33-34 34-35 34-38
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-12 9-10 10-11 11-12 13-14 13-18 14-15
15-16 16-17 17-18
exact/norm bonds :
5-33 9-10 10-11 11-12 11-31 13-14 13-18 13-23 13-28 14-15 14-22 14-27 15-16 15-26 16-17 17-18 17-20 18-24 18-29 33-34 34-35 34-38
exact bonds :
2-7 7-8 15-19 17-25 19-21
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-12
```

G2:OH,H

Connectivity:

34:3 X maximum RC ring/chain

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS

20:CLASS 21:CLASS

22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS

30:Atom 31:CLASS

33:CLASS 34:CLASS 35:CLASS 38:CLASS

Generic attributes :

34:

Number of Carbon Atoms : less than 7

L1 STRUCTURE UPLOADED

=> s l1

SAMPLE SEARCH INITIATED 12:25:59 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE** 0 TO 0 PROJECTED ITERATIONS:

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s ll sss full

FULL SEARCH INITIATED 12:26:07 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED -0 TO ITERATE

0 ITERATIONS 100.0% PROCESSED

SEARCH TIME: 00.00.01

L3 0 SEA SSS FUL L1

=> log hold

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 178.36 178.57

0 ANSWERS

SESSION WILL BE HELD FOR 120 MINUTES STN INTERNATIONAL SESSION SUSPENDED AT 12:26:13 ON 02 OCT 2008

Connecting via Winsock to STN

Welcome to STN International! Enter x:X

LOGINID · SSPTAEXO1623

PASSWORD:

***** RECONNECTED TO STN INTERNATIONAL ******
SESSION RESUMED IN FILE 'REGISTRY' AT 12:27:35 ON 02 OCT 2008
FILE 'REGISTRY' ENTERED AT 12:27:35 ON 02 OCT 2008
COPYRIGHT (C) 2008 American Chemical Society (ACS)

 COST IN U.S. DOLLARS
 SINCE FILE
 TOTAL

 BUTRY
 SESSION

 FULL ESTIMATED COST
 178.36
 178.57

_.

Uploading C:\Program Files\STNEXP\Queries\10525783generic2.str

chain nodes :

1 2 3 4 5 6 8 9 10 11 12 13 14 15 16 17 18

chain bonds :

```
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-12 9-10 10-11 11-12 13-14 13-18 14-15
15-16 16-17 17-18
exact/norm bonds :
5-33 9-10 10-11 11-12 11-31 13-14 13-18 13-23 14-15 14-22 15-16 16-17
17-18 17-20 18-24 33-34 34-35 34-38
exact bonds :
2-7 7-8 13-28 14-27 15-19 15-26 17-25 18-29 19-21
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-12
G1:0,S
G2:OH,H
Connectivity:
34:3 X maximum RC ring/chain
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS
20:CLASS 21:CLASS
22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS
30:Atom 31:CLASS
33:CLASS 34:CLASS 35:CLASS 38:CLASS
Generic attributes :
34:
Number of Carbon Atoms : less than 7
T. 4
     STRUCTURE UPLOADED
=> s 14
SAMPLE SEARCH INITIATED 12:28:03 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -
                                    0 TO ITERATE
100.0% PROCESSED
                     0 ITERATIONS
                                                             0 ANSWERS
SEARCH TIME: 00.00.01
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
                              **COMPLETE**
                       BATCH
PROJECTED ITERATIONS:
                              0 TO
PROJECTED ANSWERS:
                               0 TO
L5
            0 SEA SSS SAM L4
=> d 14
L4 HAS NO ANSWERS
L4
               STR
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
Structure attributes must be viewed using STN Express query preparation.
=> s 14 sss full
FULL SEARCH INITIATED 12:28:27 FILE 'REGISTRY'
```

FULL SCREEN SEARCH COMPLETED - 5 TO ITERATE

100.0% PROCESSED 5 ITERATIONS

0 SEA SSS FUL L4

SEARCH TIME: 00.00.01

1.6 00 N

Uploading C:\Program Files\STNEXP\Queries\10525197generic3.str

0 ANSWERS

chain nodes : 7 19 20 21 22 23 24 25 26 27 28 29 31

ring nodes :

1 2 3 4 5 6 8 9 10 11 12 13 14 15 16 17 18 chain bonds :

2-7 7-8 11-31 13-23 13-28 14-22 14-27 15-19 15-26 17-20 17-25 18-24

18-29 19-21

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-12 9-10 10-11 11-12 13-14 13-18 14-15

15-16 16-17 17-18 exact/norm bonds :

9-10 10-11 11-12 11-31 13-14 13-18 13-23 14-15 14-22 15-16 16-17 17-18

17-20 18-24 exact bonds :

2-7 7-8 13-28 14-27 15-19 15-26 17-25 18-29 19-21

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-12

G1:0,S

G2:OH,H

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS 20:CLASS 21:CLASS 22:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS

30:Atom 31:CLASS

L7 STRUCTURE UPLOADED

=> s 17

SAMPLE SEARCH INITIATED 12:29:07 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 0 TO 0 PROJECTED ANSWERS: 0 TO 0

L8 0 SEA SSS SAM L7

=> s 17 sss full

FULL SEARCH INITIATED 12:29:11 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 10 TO ITERATE

100.0% PROCESSED 10 ITERATIONS SEARCH TIME: 00.00.01

L9 0 SEA SSS FUL L7

=> log hold

COST IN U.S. DOLLARS SINCE FILE TOTAL SESSION FULL ESTIMATED COST 535.54 535.75

0 ANSWERS

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 12:29:15 ON 02 OCT 2008

Connecting via Winsock to STN

Welcome to STN International! Enter x:X

LOGINID:SSPTAEX01623

PASSWORD:

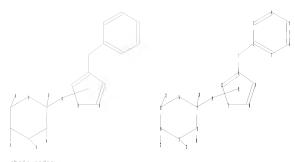
* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * * SESSION RESUMED IN FILE 'REGISTRY' AT 12:31:36 ON 02 OCT 2008 FILE 'REGISTRY' ENTERED AT 12:31:36 ON 02 OCT 2008 COPYRIGHT (C) 2008 American Chemical Society (ACS)

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 535.54 535.75

=>

Uploading C:\Program Files\STNEXP\Queries\10525197generic4.str



chain nodes : 7 19 20 21 22 23 24

ring nodes :

1 2 3 4 5 6 8 9 10 11 12 13 14 15 16 17 18 chain bonds :

2-7 7-8 13-23 14-22 15-21 17-19 17-20 18-24

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-12 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18

exact/norm bonds : 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18 17-19

exact bonds :

2-7 7-8 13-23 14-22 15-21 17-20 18-24

normalized bonds : 1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-12

G1:0,S

G2:OH,H

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS 20:CLASS 21:CLASS

22:CLASS 23:CLASS 24:CLASS 25:Atom

L10 STRUCTURE UPLOADED

=> s 110

SAMPLE SEARCH INITIATED 12:32:03 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -4 TO ITERATE

100.0% PROCESSED SEARCH TIME: 00.00.01 4 ITERATIONS

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 4 TO 200 PROJECTED ANSWERS: 0 TO 0

0 SEA SSS SAM L10 L11

=> s 110 sss full

FULL SEARCH INITIATED 12:32:08 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 30 TO ITERATE

100.0% PROCESSED 30 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

T-12 0 SEA SSS FUL L10

=> log hold COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 713.90 714.11 FULL ESTIMATED COST

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 12:32:10 ON 02 OCT 2008

Connecting via Winsock to STN

Welcome to STN International! Enter x:X

LOGINID: SSPTAEX01623

PASSWORD:

* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * SESSION RESUMED IN FILE 'REGISTRY' AT 12:43:17 ON 02 OCT 2008 FILE 'REGISTRY' ENTERED AT 12:43:17 ON 02 OCT 2008

COPYRIGHT (C) 2008 American Chemical Society (ACS)

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 713.90 714.11

FULL ESTIMATED COST

Uploading C:\Program Files\STNEXP\Queries\10525197generic5.str

chain nodes : 7 19 20 21 22 23 24 27 28 29 30 31 ring nodes : 1 2 3 4 5 6 8 9 10 11 12 13 14 15 16 17 18 chain bonds : 2-7 7-8 12-19 13-23 13-30 14-22 14-29 15-21 15-27 17-19 17-20 18-24 18-31 27-28 ring bonds : 1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-12 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18 exact/norm bonds : 8-9 8-12 9-10 10-11 11-12 12-19 13-14 13-18 13-30 14-15 14-29 15-16 16-17 17-18 17-19 18-31 exact bonds : 2-7 7-8 13-23 14-22 15-21 15-27 17-20 18-24 27-28 normalized bonds : 1-2 1-6 2-3 3-4 4-5 5-6

G1:0.S

G2:OH,H

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS

L13 STRUCTURE UPLOADED

=> s 113 SAMPLE SEARCH INITIATED 12:43:45 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 60 TO ITERATE 100.0% PROCESSED 60 ITERATIONS SEARCH TIME: 00.00.01 44 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 736 TO 1664
PROJECTED ANSWERS: 483 TO 1277

L14 44 SEA SSS SAM L13

=>

Uploading C:\Program Files\STNEXP\Queries\10525197generic6.str

chain nodes :

1 2 3 4 5 6 8 9 10 11 12 13 14 15 16 17 18

chain bonds :

```
ring bonds :
1 - 2^{^{-}} 1 - 6 \quad 2 - 3 \quad 3 - 4 \quad 4 - 5 \quad 5 - 6 \quad 8 - 9 \quad 8 - 12 \quad 9 - 10 \quad 10 - 11 \quad 11 - 12 \quad 13 - 14 \quad 13 - 18 \quad 14 - 15
15-16 16-17 17-18
exact/norm bonds :
5-32 8-9 8-12 9-10 10-11 11-12 12-19 13-14 13-18 13-30 14-15 14-29 15-16
16-17 17-18 17-19 18-31 32-33 33-34
exact bonds :
2-7 7-8 13-23 14-22 15-21 15-27 17-20 18-24 27-28
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
G1:0,S,C
G2:OH,H
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS
20:CLASS 21:CLASS
22:CLASS 23:CLASS 24:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS
32:CLASS 33:CLASS
34 · CLASS
L15
       STRUCTURE UPLOADED
=> s 115
SAMPLE SEARCH INITIATED 12:45:25 FILE 'REGISTRY'
                                       28 TO ITERATE
SAMPLE SCREEN SEARCH COMPLETED -
100.0% PROCESSED
                       28 ITERATIONS
                                                                  15 ANSWERS
SEARCH TIME: 00.00.01
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
                         BATCH **COMPLETE**
PROJECTED ITERATIONS:
                                243 TO
                                           877
PROJECTED ANSWERS:
                                 68 TO
                                            532
T.16
             15 SEA SSS SAM L15
=> d 116 scan
L16 15 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
     1-Piperazinecarboxylic acid, 4-[2,2-dimethyl-3-[[2-[3-methyl-4-[[3-(1-
     methylethyl)-5-[(2,3,4,6-tetra-0-acetyl-β-D-glucopyranosyl)oxy]-1H-
     pyrazol-4-yl]methyl]phenoxy]ethyl]amino]-1,3-dioxopropyl]-, phenvlmethyl
     ester
     C47 H61 N5 O15
MF
Absolute stereochemistry.
```

PAGE 1-B

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):4

- MF C47 H61 N5 O15

Absolute stereochemistry.

PAGE 1-B

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L16 15 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN Urea, N-[2-(dimethylamino)ethyl]-N'-[2-[4-[[3-(β -D-glucopyranosyloxy)-5-(1-methylethyl)-1H-pyrazol-4-yl]methyl]-3-methylphenoxylethyl]- (9CI) MF C27 H43 N5 08

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L16 15 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN β-D-Glucopyranoside, 5-(1-methylethyl)-4-[[4-[3-[(3-pyridinylmethyl)amino]propoxy]phenyl]methyl]-1H-pyrazol-3-yl

MF C28 H38 N4 O7

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L16 15 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN β -D-Glucopyranoside, 4-[[4-(2-aminoethoxy)phenyl]methyl]-5-(1-methylethyl)-1H-pyrazol-3-yl, 2,3,4,6-tetraacetate

MF C29 H39 N3 O11

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s 115 sss full

FULL SEARCH INITIATED 12:46:17 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED -667 TO ITERATE

100.0% PROCESSED 667 ITERATIONS 360 ANSWERS

TOTAL

SINCE FILE

SEARCH TIME: 00.00.01

L17 360 SEA SSS FUL L15

=> file hcaplus COST IN U.S. DOLLARS

ENTRY SESSION FULL ESTIMATED COST 894.10 894.31

FILE 'HCAPLUS' ENTERED AT 12:46:20 ON 02 OCT 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 2 Oct 2008 VOL 149 ISS 14 FILE LAST UPDATED: 1 Oct 2008 (20081001/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 117 L18 4 L17

=> d 118 1-4 ti abs bib

- L18 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Preventive or remedy for diseases caused by hyperglycemia
- AB It is intended to provide a medicinal composition containing as the active ingredient a selective SGLT1 inhibitor (for example, an SGLT1 inhibitor substantially showing no GLUT2 and/or GLUT5 inhibitory effect) which exerts a sugar absorption inhibitory effect over a wide range, also has a hypoglycemic effect caused by fructose intake in usual diet and thus can show an outstanding hypoglycemic effect and which is appropriate as a preventive or a remedy for diseases caused by hyperglycemia (for example, diabetes, impaired glucose tolerance, diabetic complications or obesity).
- AN 2004:486406 HCAPLUS <<LOGINID::20081002>>
- DN 141:47334
- TI Preventive or remedy for diseases caused by hyperglycemia
- IN Ito, Fumiaki; Shibazaki, Toshihide; Tomae, Masaki; Fushimi, Nobuhiko; Isaji, Masayuki
- PA Kissei Pharmaceutical Co., Ltd., Japan
- SO PCT Int. Appl., 34 pp.
- CODEN: PIXXD2
- DT Patent LA Japanese
- FAN.CNT 1

	PAT					KIND DATE					APPL								
PI																			
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
			CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	KZ,	LC,	LK,	
			LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	
			OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,	
			TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	zw			
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
			BY,	KG,	ΚZ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
			ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
						CF,													ΤG
	CA 2507665									CA 2003-2507665									
						A1 20040623				AU 2003-289156									
	EP 1568380					A1 20050831				EP 2003-777222									
		R:				DE,												PT,	
						LV,													
		1744																	
		2006																	
	IN 2005DN02385 A									IN 2005-DN2385					2	J050	603		
PRAI							A 20021204												
		2003																	
DE C	NT	27	TU	PDF	A D F	27 0	TTED	DEE	PDPM	OF C	TAYZE	TADI	E EO	D TU	TC DI	CODI	0		

RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L18 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of pyrazolyl glycoside derivatives as inhibitors of 1,5-anhydroglucitol/fructose/mannose transporters

AB The title compds. [I; R = each (un)substituted C3-8 cycloalkyl, C6-10 aryl, C2-9 heterocycloalkyl, or C1-9 heteroaryl; R1 = H, each (un)substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, C3-8 cycloalkyl, C6-10 aryl, C2-9 heterocycloalkyl, or C1-9 heteroaryl; one of C0 and T0 = α- or β-D-glucopyranosyloxy or -mannopyranosyloxy or β-D-deoxyglucopyranosyloxy- and the other = (CH2)nAr; wherein Ar = each (un)substituted C6-10 aryl or C1-9 heteroaryl; n = an integer of 0-2] or pharmacol. acceptable salts or prodrugs thereof are prepared Also disclosed are medicinal composition containing the compound I, medicinal use thereof,

and intermediates in producing the same. These compds. exerts an excellent effect of inhibiting human 1,5-anhydroglucitol/fructose/mannose transporters and inhibit reabsorption or cellular uptake of glucose, fructose, and mannose in kidney or absorption of these saccharide small intestine and inhibit the increase in blood sugar. Therefore, they are useful as preventives, progress inhibitors or remedies for a disease caused by the over intake of at least one saccharide selected from among glucose, fructose, and mannose or a disease caused by hyperglycemia (diabetic complication, diabetes, or diabetic nephropathy). Thus, glycosidation of 1-isopropyl-5-(4-methoxyphenyl)-4-[4-methoxyphenyl)methyl]-1,2-dhydro-3H-pyrazol-3-one by acetobromo- α -D-glucose in the presence of benzyltributylammonium bromide in a mixture of CH2Cl2 and 5 N aqueous NaOH at room temperature for 1.5 h followed by treatment of

the product with NaOMe in MeOH gave 3-(β -D-glucopyranosyloxy)-1-isopropyl-5-(4-methoxyphenyl)-4-[(4-methoxyphenyl)]methyl]-1H-pyrazole (II). II in vitro inhibited the uptake of [14C]methyl α -D-glucopyranoside in COS-7 cells transfected with human SMINT/FME185-FL expression plasmid with ICSO of 92 nM. 2004;31011 HCAPLUS < λ COGINID::20081002>>

DN 140:321649

AN

TI Preparation of pyrazolyl glycoside derivatives as inhibitors of 1,5-anhydroglucitol/fructose/mannose transporters

IN Fujikura, Hideki; Kikuchi, Norihiko; Tazawa, Shigeki; Yamato, Tokuhisa; Isaji, Masayuki

PA Kissei Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 159 pp. CODEN: PIXXD2

DT Patent

PAN.	PAT										APPLICATION NO.						DATE			
PI								WO 2003-JP12477						20030930						
		W:	AE,	AG,	, AL, AM, AT, AU, AZ,				AZ,	BA,	BB,	BG,	BZ,	CA,	CH,	CN,				
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	GE,		
			GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	ΚZ,	LC,	LK,	LR,		
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NI,	NO,	NZ,	OM,		
								RU,								ΤJ,	TM,	TN,		
			TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	zw					
		RW:						ΜZ,												
								TM,												
								IE,												
								CM,												
	CA 2500873										CA 2003-2500873									
	AU 2003272903										AU 2003-272903									
	EP								EP 2003-753967 GB, GR, IT, LI, LU,											
		R:																PT,		
	***	0000						RO,										0.1.0		
DDAT		20060									05 2	005-		20050919						
PRAI		2002-						2002												
JP 2002-378959 A 20021227 WO 2003-JP12477 W 20030930																				
os		PAT 1				**		2003	0930											
						42 C	TTED	REF	EREN	CES AVAILABLE FOR THIS R						ECOR	D			

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECOR ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Preparation of 4-benzylpyrazolyl glucopyranosides and galactopyranoside derivatives as sodium-glucose cotransporter (SGLT1) inhibitors, medicinal composition containing the same, medicinal use thereof, and intermediate for production thereof

GI

AB Pyrazole derivs. represented by the general formula (I) [R1 = H, C1-6 alky1, C2-6 alkenyl, hydroxy-C2-6 alkyl, C3-7 cycloalkyl-C1-6 alkyl, each (un)substituted aryl or aryl-C1-6 alkyl; one of Q and T = Q1 or Q2 and the other = C1-6 alkyl, halo-C1-5 alkyl, C1-6

alkoxy-C1-6 alkyl, C3-7 cycloalkyl; R2 = H, halo, OH, C1-6 alkyl, C1-6 alkoxy, C1-6 alkylthio, halo-C1-6 alkyl, halo-C1-6 alkoxy, C1-6 alkoxy-C1-6 alkoxy, C3-7 cycloalkyl-C2-6 alkoxy, etc.; X = a single bond, O, S; Y = optionally hydroxy-substituted C1-6 alkylene or C2-6 alkenylene; Z = RB, CORC, SO2RC, CO(RD)RE, SO2NHRF, C(:NRG)N(RH)RI; wherein RC = each (un) substituted aryl, heteroaryl, or C1-6 alkyl; R4, RB, RD, RE, RF = H, each (un)substituted aryl, heteroaryl, or C1-6 alkyl; NR4RB or NRDRE together forms (un)substituted C2-6 cyclic amino; RG, RH, RI = H, (un)substituted C1-6 alkvl, etc.; R3, R5, R6 = H, halo, C1-6 alkvl, C1-6 alkoxyl or pharmacol, acceptable salts thereof are prepared These compds. have excellent human SGLT1 inhibitory activity and are useful as preventives or therapeutic agents for diseases attributable to hyperglycemia such as diabetes, impaired glucose tolerance, fasting blood sugar abnormality, complications of diabetes, obesity, hyperinsulinemia, hyperlipidemia, hypercholesteremia, hypertriglyceridemia, lipid metabolism disorder, atherosclerosis, hypertension, ischemic heart failure, edema, hyperuricemia, and gout and for diseases attributable to an increased blood galactose level such as galactosemia. For example, $3-(\beta-D-glucopyranosyloxy)-4-[[4-[3-[3-(2-hydroxy-1,1$ dimethylethyl)ureido[propoxy]-2-methylphenyl]methyl]-5-isopropyl-1Hpyrazole in vitro inhibited the uptake of [14C]methyl α-Dglucopyranoside in CHO-K1 cells expressing human SGLT1 with IC50 of 19 nM. For another example, 3-(B-D-glucopyranosyloxy)-4-[[4-(2guanidinoethoxy)-2-methylphenyl]methyl]-5-isopropyl-1H-pyrazole at 1 mg/kg p.o. lowered the serum glucose concentration from 303±63 (control) to 165±17 mg/dL after 1 h in rats with streptozotocin-induced diabetes. 2004:182896 HCAPLUS <<LOGINID::20081002>>

AN 2004:182896 DN 140:236000

- TI Preparation of 4-benzylpyrazolyl glucopyranosides and galactopyranoside derivatives as sodium-glucose cotransporter (SGLT1) inhibitors, medicinal composition containing the same, medicinal use thereof, and intermediate for production thereof
- IN Fushimi, Nobuhiko; Shimizu, Kazuo; Yonekubo, Shigeru; Teranishi, Hirotaka; Tomae, Masaki; Isaji, Masayuki
- PA Kissei Pharmaceutical Co., Ltd., Japan

A

- SO PCT Int. Appl., 270 pp.
- CODEN: PIXXD2

CN 1688597

- DT Patent
- LA Japanese
- FAN. CNT 1

FAN.CNT 1																		
PATENT NO.					KIND DATE		DATE	TE APPLICATION NO.								DATE		
PΙ	WO	O 2004018491			A1	A1 20040304				WO 2	003-		20030821					
		W:	ΑE,	AG,	AL,	AM,	AT,	, AU, AZ,		BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	KZ,	LC,	LK,	LR,	LS,
			LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	PG,
			PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,	TN,	TR,
			TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW				
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
			KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
			FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
			BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
	JP	2004	1372	45		A 20040513				JP 2002-324076						20021107		
	CA	2496	329			A1		2004	0304	CA 2003-2496329								
	AU	2003	2622	63		A1		2004	0311		AU 2	003-	2622	63		20	0030	821
	EP	P 1548024			A1		2005	0629		EP 2	003-	7927	60		20	0030	821	
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
	BR 2003013694					A		2005	0705									

20051026

CN 2003-824499

20030821

	ZA 2005001549	A	20060726	ZA 2005-1549	20030821
	NZ 538423	A	20070223	NZ 2003-538423	20030821
	US 20050272669	A1	20051208	US 2005-525197	20050222
	MX 2005PA02129	A	20050603	MX 2005-PA2129	20050223
	NO 2005001411	A	20050426	NO 2005-1411	20050317
	IN 2007DN07100	A	20071012	IN 2007-DN7100	20070913
PRAI	JP 2002-244381	A	20020823		
	JP 2002-324076	A	20021107		
	WO 2003-JP10551	W	20030821		
	IN 2005-DN666	A3	20050221		
0.5	MADDAT 140.236000				

OS MARPAT 140:236000

GΙ

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L18 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of pyrazolyl glucopyranoside and galactopyranoside derivatives inhibitors of human sodium-glucose cotransporter 1 (SGLT1), medicinal composition containing the same, medicinal use thereof, and intermediate for production thereof

AB Pyrazoles derivs, represented by the general formula (I) [R1 = H, C1-5 alkyl, C2-5 alkenyl, hydroxy-C2-5 alkyl, C3-7 cycloalkyl, C3-7 cvcloalkvl-C1-6 alkvl (un)substituted arvl or arvl-C1-6 alkvl; one of O and T = Q1, Q2 and the other = C1-5 alkyl, halo-C1-6 alkyl, C1-6 alkoxy-C1-6 alkyl, C3-7 cycloalkyl; R2 = H, halo, OH, C1-6 alkyl, C1-6 alkoxy, C1-6 alkylthio, halo-C1-6 alkyl, halo-C1-6 alkoxy, C1-6 alkoxy-C1-6 alkoxy, C3-7 cycloalky1-C2-6 alkoxy, etc.; X = a single bond, O, S; Y = a single bond, C1-6 alkylene, C2-6 alkenylene; Z = CO, SO2; R4, R5 = H, (un)substituted C1-6 alkyl; or NR4R5 together forms an (un) substituted C2-6 cyclic amino; R3, R6, R7 = H, halo, C1-6 alkyl, C1-6 alkoxy] or pharmacol. acceptable salts thereof or prodrug of either are prepared These compds. have excellent human SGLT1 inhibitory activity and are useful as preventives or therapeutic agents for (1) diseases attributable to hyperglycemia such as diabetes, impaired glucose tolerance, complications of diabetes, obesity, hyperinsulinemia, hyperlipidemia, hypercholesteremia, hypertriglycemia, lipid metabolism

disorder, atherosclerosis, hypertension, ischemic heart failure, edema, hyperuricemia, or gout and (2) diseases attributable to high level of galactose, galactosemia. For example, $3-(\beta-D-\text{glucopyranosyloxy})-4-[14-[3-(2-hydroxy-1,1-bis(hydroxymethyl)ethylcarbamoyllpropyl]phenyl]methyl)-5-isoproyl-1H-pyrazole at 1 mg/kg p.o. lowered blood glucose in$

diabetic rats from 297±35 to 178±19 mg/dL in 1 h.
AN 2004:143172 HCAPLUS <<LOGINID::20081002>>

DN 140:199632

- TI Preparation of pyrazolyl glucopyranoside and galactopyranoside derivatives inhibitors of human sodium-glucose cotransporter 1 (SGLT1), medicinal composition containing the same, medicinal use thereof, and intermediate for production thereof
- IN Teranishi, Hirotaka; Fushimi, Nobuhiko; Yonekubo, Shigeru; Shimizu, Kazuo; Shibazaki, Toshihide; Isaji, Masayuki
- PA Kissei Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 215 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

										APPLICATION NO.									
PI							WO 2003-JP10048												
	W: AE, AG, AL,		AL,			AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,			
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,	
												MX,							
			PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,	TN,	TR,	
												ZA,							
		RW:										TZ,							
												CH,							
												NL,							
												GW,							
									CA 2003-2494179										
		AU 2003254847																	
	EP 1544208								GB, GR, IT, LI, LU,										
		к:																PT,	
	DD	2002								CY, AL, TR, BG, CZ,									
	NI7	2003	17	90		A				BR 2003-13290 NZ 2003-538117									
		2006																	
		7375				B2		2008		US 2005-523820						20050204			
		2005									MX 2	2005-	PA15	49		2	0050	208	
		2005																	
		1082				A1		2008				2006-				20050308 20060227			
PRAI	JP	2002	-232	074				2002						-		_			
_ ,						A 20021105													
WO 2003-JP10048					W		2003	0807											
os																			

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT